FORM PTO-1449

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

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ATTY. DOCKET NO.	SERIAL NO.
30727.0013.CIP1	09/518,501
APPLICANT: METABASIS THERAPEUTICS, INC.	
FILING DATE: March 5, 1999	**GROUP:** 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA	3,018,302	01.23.62	Bielefeld, et al.			
	AB	5,157,027	10/20 92	Biller, et al.			
	AC	5,658,889	8/19/97	Gruber, et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES	TRANSLATION NO
	AD	0 002 062 A	30.05.79	EP (Abstract)				
	AE	0 072 531 A	23.02.83	EP (Abstract)				
	AF	0 158 057 A	16.10.85	EP (Abstract)				
	AG	0 180 276	28.12.88	EP				
	AH	0 261 283	22.09.86	EP				
	AI	0 161 955 A	21.11.85	EPO				
	AJ	0 338 372 A	25.10.89	EPO				
	AK	0 353 692 A	07.02.90	EPO				
	AL	0 481 214 A	22.04.92	EPO				
	AM	492 738 A	30.06.70	CH				
	AN	16 93 219 A	17.09.70	DE (Abstract)				

EXAMINER:	DATE CONSIDERED: 7/9/01

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	AQ	97/03679 A	06.02.97	WO				
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all duplicates

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	BK	Neidlein, et al., "Mild Preparation of 1-Benzyloxyiminoalkylphosphonic Dichlorides: Application to the Synthesis of Cyclic Phosphonic Deisters and Cyclic Monoester Amides," Heterocycles 35: 1185-1203 (1993)

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#11 (Use several sheets if necessary)	FILING DATE: March 5, 1999	GROUP: 1[redacted]

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
TCM	AA	3,018,302	01/23/62	Bielefeld, et al.	260	461	—
TCM	AB	5,157,027	10/20/92	Biller, et al.	514	167	—
TCM	AC	5,658,889	8/19/97	Gruber, et al.	514	43	—

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TCM	AF	0 158 057 A	16.10.85	EP (U.K. English language translation)				
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	AM	492 738	30.06.70	CH (and English language Abstract)				
	AN	987,378	17.09.70	UK				

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
	BA	Farquhar, et al., "Synthesis and Biological Evaluation of 9-[5'-(2-Oxo-1,3,2-oxazaphosphorinan-2-yl)-ß-D-arabinosyl]adenine and 9-[5'-(2-Oxo-1,3,2-dioxazaphosphorinan-2-yl)-ß-D-arabinosyl]adenine: Potential Neutral Precursors of 9-[ß-D-Arabinofuranosyl]adenine 5'-Monophosphate," J. Med. Chem. 28: 1358-1361 (1985)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known	
Application Number	09/518,501
Filing Date	March 3, 2000
First Named Inventor	Erion
Group Art Unit	1624
Examiner Name	T. McKenzie
Attorney Docket Number	030727.0013.CIP1

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	AA	Coppi, et al., "Lewis Acid Mediated Condensation of Alkenols and Aldehydes. A Selective Synthesis of Tetrahydropyrans and Oxepanes," J. Org. Chem., Vol. 53, No. 4, 911-913 (1988)	
	AB	Lohr et al., "Targeted chemotherapy by intratumor injection of encapsulated cells engineered to produce CYP2B1, and ifosfamide activating cytochrome P450," Gene Therapy, 5, 1070-1078 (1988).	
	AC	Bijsterbosch, et al., "Disposition of the Acyclic Nucleoside Phsophonate (S)-9-(3-Hydroxy-2-Phosphonylmethoxypropyl)Adenine," Antimicrobial Agents and Chemotherapy ," Vol. 42, p. 1146-1150 (May 1998).	
	AD	de Waziers, et al., "Cytochrome P 450 Isoenzymes, Epoxide Hydrolase and Glutathione Transferases in Rat and Human Hepatic and Extrahepatic Tissues1," The Journal of Pharmacology and Experimental Therapeutics, Vol. 253, No.1, p. 387-394 (1989).	

Examiner Signature		Date Considered	2/12/03

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[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Documents. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 2

Complete If Known	
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First Named Inventor	Erion
Group Art Unit	1624
Examiner Name	T. McKenzie
Attorney Docket Number	030727.0013.CIP1

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Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
TM	AE	He, et al., "Inactivation of Cytochrome P450 3A4 by Bergamottin a Component of Grapefruit Juice," Chem. Res. Toxicol, Vol. 11, No. 4, p. 252-259 (1998).	
TM	AF	Jounaidi et al., "Retroviral Transfer of Human Cytochrome P450 Genes for Oxazaphosphorine-based Cancer Gene Therapy," Cancer Research, Vol. 58, p. 4391- 4401 (Oct. 1, 1998).	

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Examiner Name	McKenzie, T.
Attorney Docket Number	45198.00013.RCE (CIP1)

U.S. PATENT DOCUMENTS

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TT		6,054,587		Reddy et al.	04/25/00	
		6,110,903		Kasibhatla et al.	08/29/00	
		6,284,748		Dang et al.	09/04/01	
		6,294,672		Reddy et al.	09/25/01	
		6,312,662		Erion et al.	11/06/01	
		6,399,782		Kasibhatla et al.	06/04/02	
✓		6,489,476		Dang et al.	12/03/02	

FOREIGN PATENT DOCUMENTS

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Examiner Signature	Tom McKenzie	Date Considered	4/16/04

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

Complete If Known	
Application Number	09/518,501
Filing Date	March 3, 2000
First Named Inventor	Erion et al.
Group Art Unit	1624
Examiner Name	T. McKenzie
Attorney Docket Number	45198.00013.RCE

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		FARQUHAR et al., "Synthesis and Antitumor Evaluation of Bis[pivaloyloxy)methyl] 2'-Deoxy-5-fluorouridine 5'-Monophosphate (FdUMP): A Strategy to Introduce Nucleotides into Cells," J. Med. Chem., 37:3902-3909 (1994).	
		LEFEBVRE, et al., Mononucleotide Phosphotriester Derivatives with S-Acyl-2-thioethyl Bioreversible Phosphate-Protecting Groups: Intracellular Delivery of 3'-Azido-2',3'-dideoxythymidine 5'-Monophosphate," J. Med. Chem., 38:3941-3950 (1995).	

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Application Number	09/518,501
Filing Date	March 3, 2000
First Named Inventor	Erion et al.
Group Art Unit	1624
Examiner Name	T. McKenzie
Attorney Docket Number	032465.00013.RCE (CIP1)

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		Beaucage and Iyer, "The Synthesis of Modified Oligonucleotides by the Phosphoramidite Approach and Their Applications," Tetrahedron, 49(28):6123-6194 (1993).	
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Examiner Name	T. McKenzie
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Examiner Signature	Dan McKenzie	Date Considered	4/16/07

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